

## Preface

Primary users of this manual are NBC staff officers, staff weather officers, fire support coordination personnel, artillery officers, and others involved in planning NBC operations. These soldiers must understand what effect weather and terrain have on nuclear, biological, and chemical (NBC) operations and smoke. This manual contains general information and the basic principles on how to get the best results. Commanders and staffs involved in planning for use of incendiaries or smoke operations will also benefit from the use of this manual along with other references such as FM 3-50, FM 3-100, FM 3-3, FM 3-4, and FM 3-5.

On the battlefield, the influences of weather and terrain on NBC operations provide opportunities to both sides. To retain the initiative, friendly forces leaders and staff officers must understand how weather and terrain can be used to their advantage.

FM 3-6 implements International Standardization Agreement (STANAG) 2103, Reporting Nuclear Detonations, Radioactive Fallout, and Biological and Chemical Attacks and Predicting Associated Hazards.

This manual explains how weather and terrain influence nuclear, biological, and chemical operations and discusses the following topics for use when planning operations:

- Basic principles of meteorology as they pertain to NBC operations.
- Influence of weather on the use and behavior of NBC agents.
- Local weather predictions and their use.
- Influence of terrain on the behavior of NBC agents.
- US Air Force Air Weather Service (AWS) forecasts and their use in planning for operations in an NBC environment. (The Navy gets meteorological forecasts from components of the Naval Oceanography Command. Meteorological report information is in the NAVOCEANCOMINST 3140.1 publications series. It also contains information on the behavior of smoke clouds and incendiaries. In addition, it discusses the influences of weather and terrain on the thermal, blast, and radiation effects of a nuclear detonation.)

Staffs planning the use of chemical weapons and commanders approving strikes must understand basic weather characteristics. Therefore, weather analyses significantly influence the selection of agents and munitions for employment. The target analyst must know his or her weather data needs and where to get this information in a combat environment. Chapter 1 covers meteorology and the impact

of weather on chemical agent use. The remaining chapters address the impact of weather on smoke, incendiaries, biological agents, and nuclear detonations.

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